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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,220	03/19/2001	Toshihiro Aruga	Q63638	6913

7590 04/05/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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Washington, DC 20037

EXAMINER	
DADA, BEEMNET W	

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/810,220	ARUGA, TOSHIHIRO	
	Examiner	Art Unit	
	Beemnet W Dada	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/10/04* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in reply to an amendment filed on December 10, 2004. Claims 1, 13 and 20 have been amended. Claims 1-25 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-3 and 8-11, 20 and 25 are rejected under 35 U.S.C. 102(a) as being anticipated by Emmott et al (hereinafter Emmott), European Patent EP 0,965,938.

4. As per claim 1, Emmott discloses a portable terminal (abstract, fig 1) comprising:

a storage device which stores secret data (smart card, col 3 ln 50-55 and col 4 ln 1-5);

a system unit which receives said secret data from said storage unit to carry out a predetermined process associated with said secret data (communications device, fig 1, paragraph 5 and col 4 ln 12-15);

a signal transfer line set (bus, col 3 ln 51-55) which is provided between said storage device and said control unit and on which a control signal and said secret data are transferred (fig 3), said control signal relating to the transfer of said secret data (col 3 ln 51-55); and

a control section (smart card sensor, col 2 ln 27-30) which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said

system unit or from said system unit to said storage device on said signal transfer line set to permit the transfer of said secret data (paragraph 17, such a control section must be present for controlling transfer of data on the bus).

5. As per claim 2, Emmott discloses the claimed limitations as described above (see claim 1). Emmott further discloses wherein said storage device is detachable (smart card, 23 of fig 1 and col 3 ln 48-51), and said secret data is personal data of user (paragraph 2).

6. As per claim 3, Emmott discloses the claimed limitations as described above (see claim 1). Emmott further discloses wherein said storage device is a detachable electronic money card (paragraph 2), and said secret data is electronic money data (col 4 ln 1-5).

7. As per claim 8, Emmott discloses the claimed limitations as described above (see claim 1). Emmott further discloses wherein said control section comprises: a switch section which generates a valid signal in response to operation of said switch section by a user (col 4 ln 46-48); and a control circuit which operates to permit transfer of said control signal in response to said valid signal such that the transfer of said secret data is permitted (col 4 ln 46-50).

8. As per claim 9, Emmott discloses the claimed limitations as described above (see claim 8). As for wherein said switch section generates an invalid signal when said switch section is not operated, and said control circuit operates to inhibit the transfer of said control signal in response to said invalid signal such that the transfer of said secret data is inhibited, Emmott discloses that the smart card is only enabled by pressing on the switch (paragraph 10 and col 4 ln 46-48), and thus inhibiting transfer of secret data in response to the switch not being pressed.

9. As per claim 10, Emmott discloses the claimed limitations as described above (see claim 1) and further discloses wherein said switch section includes at least a button (25 of fig 1, col 4 ln 46-48).

10. As per claim 11, Emmott discloses the claimed limitations as described above (see claim 10) and further discloses wherein said portable terminal has a side surface on which said switch section is provided (25 of fig 1).

11. As per claim 20, Emmott discloses a portable terminal (abstract, fig 1) comprising: a detachable storage device which stores secret data (smart card, col 3 ln 50-55 and col 4 ln 1-5); a system unit which outputs a control signal to said storage device (col 4 ln 50-57), and receives said secret data relating to said control signal from said storage unit to carry out a predetermined process associated with said secret data (communications device, fig 1, paragraph 5 and col 4 ln 12-15); a switch section which generates a valid signal in response to operation of said switch section by a user (col 4 ln 46-48);

a control circuit which operates to permit transfer of said control signal in response to said valid signal such that the transfer of said secret data is permitted (col 4 ln 46-50).

12. Claim 25 recites similar limitations as in claim 9 above and is rejected under the same rationale.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 4-5, 13-14, 17-19, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott et al (hereinafter Emmott), European Patent EP 0,965,938 in view of Nakamura et al (hereinafter Nakamura), US Patent 5,917,168.

15. As per claims 4 and 21, Emmott discloses the claimed limitations as described above (see claims 1 and 20). Emmott further discloses wherein said system unit outputs said control signal to said storage device (col 4 In 45-50). Emmott does not explicitly teach stopping said predetermined process when said secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device. However, Nakamura discloses a terminal with detachable memory (abstract) wherein a predetermined process is stopped when secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 In 48-58).

Both Nakamura and Emmott disclose a means of financial transaction through use of a detachable memory, device at a terminal. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Emmott because it would have prevented a deadlock situation and

increased security through validation of such data received. Furthermore, such stopping schemes are well known to be good software practice.

16. As per claims 5 and 22, Emmott-Nakamura discloses the claimed limitations as described above (see claims 4 and 21). Nakamura further discloses wherein said system unit carries out said predetermined process when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 ln 59-65).

17. As per claim 13, Emmott discloses a portable terminal (abstract, fig 1) comprising:

a detachable storage device which stores secret data (smart card, col 3 ln 50-55 and col 4 ln 1-5);

a system unit which outputs a control signal to said storage device (col 4 ln 50-57), receives said secret data from said storage unit to carry out a predetermined process associated with said secret data (communications device, fig 1, paragraph 5 and col 4 ln 12-15), and carries out a predetermined process associated with said secret data when said secret data is received from said storage device (col 4 ln 6-15 and col 4 ln 48-col 5 ln 1);

a signal transfer line set (bus, col 3 ln 51-55) which is provided between said storage device and said control unit and on which a control signal and said secret data are transferred (fig 3), said control signal relating to the transfer of said secret data (col 3 ln 51-55); and

a control section (smart card sensor, col 2 ln 27-30) which is connected to said signal transfer line set and validates transfer of said control signal from said storage device to said system unit or from said system unit to said storage device on said signal transfer line set to

permit the transfer of said secret data (paragraph 17, such a control section must be present for controlling transfer of data on the bus).

Emmott does not explicitly teach Nakamura wherein said system unit carries out said predetermined process being performed when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 In 59-65). However, Nakamura discloses a means of financial transaction using a electronic money card wherein said system unit carries out said predetermined process when said secret data is received from said storage device within the predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 In 59-65).

Both Nakamura and Emmott disclose a means of financial transaction through use of a detachable memory, device at a terminal. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Emmott because it would have prevented a deadlock situation and increased security through validation of such data received. Furthermore, such means of validation are well known to be good software practice.

18. As per claim 14, Emmott discloses the claimed limitations as described above (see claim 13). Nakamura further discloses a terminal with detachable memory (abstract) wherein a predetermined process is stopped when secret data cannot be received from said storage device within a predetermined time period after said control signal is outputted from said system unit to said storage device (col 9 I n 48-58).

Both Nakamura and Emmott disclose a means of financial transaction through use of a detachable memory device at a terminal. It would have been obvious to one of ordinary skill in

the art at the time of the applicant's invention to combine the stopping means of Nakamura within the system of Emmott because it would have prevented a deadlock situation and increased security through validation of such data received. Furthermore, such stopping schemes are well known to be good software practice.

19. As per claim 17, Emmott-Nakamura discloses the claimed limitations as described above (see claim 13). Emmott further discloses wherein said control section comprises: a switch section which generates a valid signal in response to operation of said switch section by a user (col 4 ln 46-48); and a control circuit which operates to permit transfer of said control signal in response to said valid signal such that the transfer of said secret data is permitted (col 4 ln 46-50).

20. As per claim 18, Emmott-Nakamura discloses the claimed limitations as described above (see claim 17). As for wherein said switch section generates an invalid signal when said switch section is not operated, and said control circuit operates to inhibit the transfer of said control signal in response to said invalid signal such that the transfer of said secret data is inhibited, Emmott discloses that the smart card is only enabled by pressing on the switch (paragraph 10 and col 4 ln 46-48), and thus inhibiting transfer of secret data in response to the switch not being pressed.

21. As per claim 19, Emmott-Nakamura discloses the claimed limitations as described above (see claim 17) and further discloses wherein said switch section includes at least a button (25 of fig 1, col 4 ln 46-48).

22. Claims 6-7, 15-16, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott et al (hereinafter Emmott), European Patent EP 0,965,938 in view of Nakamura et al (hereinafter Nakamura), US Patent 5,917,168, and further in view of Tetro et al (hereinafter Tetro), US Patent 6,095,413.

23. As per claims 6, 15, and 23, Emmott-Nakamura discloses the claimed limitations as described above (see claims 4, 13 and 20). Emmott further discloses use of electronic money for purchases (paragraph 20). Emmott-Nakamura does not explicitly teach wherein said system unit determines whether a total amount of electronic money used within a predetermined time interval is equal to or less than a predetermined amount of electronic money when said secret data is received from said storage device within the predetermined time period after said control signal outputted from said system unit to said storage device, and carries out said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is equal to or less than the predetermined amount of electronic money. Tetro discloses a means for electronic transaction using electronic money cards (credit cards, abstract) wherein a total amount of electronic money used within a predetermined time interval is equal to or less than a predetermined amount of electronic money when said secret data is received, is determined (col 7 ln 1315), and carries out said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is equal to or less than the predetermined amount of electronic money (col 7 ln 1230).

Both Emmott-Nakamura and Tetro disclose a means for electronic transactions involving use of a detachable memory device (electronic money cards). Emmott further discloses such a portable terminal with processing power (col 4 ln 50-col 5 ln 1). It would have been obvious to

one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Tetro within the Emmott-Nakamura combination because it would have increased security through preventing friendly fraud).

24. As per claims 7, 16, and 24, Emmott-Nakamura-Tetro discloses the claimed limitations as described above (see claims 6, 15, and 23). Tetro further discloses wherein said system unit stops said predetermined process when it is determined that the total amount of electronic money used within the predetermined time interval is larger than the predetermined amount of electronic money (col 7 ln 8-30).

25. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Emmott et al (hereinafter Emmott), European Patent EP 0,965,938.

26. As per claim 12, Emmott discloses the claimed limitations as described above (see claim 11). Emmott further discloses wherein the switch is held down by a smart card (col 2 ln 38-44) and that the smart card is activated by pressing the smart card on a side of the portable device (col 4 ln 45-50 and fig 1). Emmott does not explicitly teach a concave surface being formed in a portion of said side surface and said switch section is provided on said concave surface. Such buttons on a concave surface are well known in the art as to designs with mobile telephones and other portable devices. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a design choice such that said switch section is provided on said concave surface because the applicant has not stated any particular reason or purpose for using such a surface other than for use of switch activation and that the means disclosed by Emmott is just as efficient.

Response to Arguments

27. Applicant's arguments filed December 10, 2004 have been fully considered but they are not persuasive. Applicant argues that Emmott does not teach or suggest a control section validating transfer of a control signal on the data bus to permit the transfer of secret data. The examiner respectfully disagrees.

Examiner would point out that Emmott teaches a control section [see for example figure 1, unit 25 and column 2 paragraph 0010] which is connected to the signal transfer line set and validates transfer of said control signal from the storage device on the signal transfer line set to permit the transfer of the secret data (i.e., the switch (unit 25, fig 1) allows data transfer between the storage device and the system unit on the data bus) [see for example column paragraph 0017]. Therefore the rejections are respectfully maintained.

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

March 31, 2005

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100